Learning and Memory

Not Reported	Ambiguous	Light	Dark	Both	Total:
17	3	5	0	0	25

Study #	Reference Code	Report	Times Cited
1	[van Praag et al., 1999, #78328]	NR	2542
2	[Foster and Wilson, 2006, #21306]	NR	803
3	[Lee and Wilson, 2002, #75432]	NR	667
4	[Dombeck et al., 2010, #4494]	NR	360
5	[Nagahara et al., 2009, #12536]	A	579
6	[Greig et al., 2005, #27788]	A	449
7	[Ragozzino et al., 1999, #69495]	NR	395
8	[Bruel-Jungerman et al., 2005, #5557]	NR	344
9	[Meshi et al., 2006, #83889]	NR	339
10	[Jankowsky et al., 2005, #84276]	NR	333
11	[Bach et al., 1995, #44098]	NR	330
12	[Haughey et al., 2002, #23444]	NR	328
13	[Kitamura et al., 2009, #8520]	L	305
14	[Kogan et al., 2000, #4480]	L	288
15	[Bruce-Keller et al., 1999, #13270]	A	284
16	[Graves et al., 2003, #65550]	L	267
17	[Kemp and Manahan-Vaughan, 2004, #72913]	NR	227
18	[Cao et al., 2007, #86630]	NR	220
19	[Wang et al., 2012, #19275]	L	218
20	[Wiltgen et al., 2006, #79709]	L	217
21	[Ivy et al., 2010, #93749]	NR	211
22	[Wei et al., 2005, #24037]	NR	208
23	[Mutso et al., 2012, #78417]	NR	205
24	[O'Shea et al., 2004, #83685]	NR	193
25	[Thirumangalakudi et al., 2008, #22183]	NR	190

Learning and Memory

Study #	Full Reference
1	H. van Praag, G. Kempermann, F. H. Gage, Running increases cell proliferation and neurogenesis in the adult mouse dentate gyrus. *Nat. Neurosci.* **2**, 266 (1999).
2	D. J. Foster, M. A. Wilson, Reverse replay of behavioural sequences in hippocampal place cells during the awake state. *Nature* **440**, 680 (2006).
3	A. K. Lee, M. A. Wilson, Memory of sequential experience in the hippocampus during slow wave sleep. *Neuron* **36**, 1183 (2002).
4	D. A. Dombeck, C. D. Harvey, L. Tian, L. L. Looger, D. W. Tank, Functional imaging of hippocampal place cells at cellular resolution during virtual navigation. *Nat. Neurosci.* **13**, 1433 (2010).
5	A. H. Nagahara *et al.* , Neuroprotective effects of brain-derived neurotrophic factor in rodent and primate models of alzheimer's disease. *Nat. Med.* **15**, 331 (2009).
6	N. H. Greig *et al.* , Selective butyrylcholinesterase inhibition elevates brain acetylcholine, augments learning and lowers alzheimer beta-amyloid peptide in rodent. *Proc. Natl. Acad. Sci. U S A* **102**, 17213 (2005).
7	M. E. Ragozzino, S. Detrick, R. P. Kesner, Involvement of the prelimbic-infralimbic areas of the rodent prefrontal cortex in behavioral flexibility for place and response learning. *J. Neurosci.* **19**, 4585 (1999).
8	E. Bruel-Jungerman, S. Laroche, C. Rampon, New neurons in the dentate gyrus are involved in the expression of enhanced long-term memory following environmental enrichment. *Eur. J. Neurosci.* **21**, 513 (2005).
9	D. Meshi, M. R. Drew, M. Saxe, M. S. Ansorge, D. David..., Hippocampal neurogenesis is not required for behavioral effects of environmental enrichment. *Ann. Neurol.* **9**, 729 (2006).
10	J. L. Jankowsky *et al.* , Environmental enrichment mitigates cognitive deficits in a mouse model of alzheimer's disease. *J. Neurosci.* **25**, 5217 (2005).
11	M. E. Bach, R. D. Hawkins, M. Osman, E. R. Kandel, M. Mayford, Impairment of spatial but not contextual memory in camkii mutant mice with a selective loss of hippocampal ltp in the range of the theta frequency. *Cell* **81**, 905 (1995).
12	N. J. Haughey *et al.* , Disruption of neurogenesis by amyloid beta-peptide, and perturbed neural progenitor cell homeostasis, in models of alzheimer's disease. *J. Neurochem.* **83**, 1509 (2002).
13	T. Kitamura *et al.* , Adult neurogenesis modulates the hippocampus-dependent period of associative fear memory. *Cell* **139**, 814 (2009).
14	J. H. Kogan, P. W. Frankland, A. J. Silva, Long-term memory underlying hippocampus-dependent social recognition in mice. *Hippocampus* **10**, 47 (2000).
15	A. J. Bruce-Keller, G. Umberger, R. McFall, M. P. Mattson, Food restriction reduces brain damage and improves behavioral outcome following excitotoxic and metabolic insults. *Ann. Neurol.* **45**, 8 (1999).
16	L. A. Graves, E. A. Heller, A. I. Pack, T. Abel, Sleep deprivation selectively impairs memory consolidation for contextual fear conditioning. *Learn. Mem.* **10**, 168 (2003).
17	A. Kemp, D. Manahan-Vaughan, Hippocampal long-term depression and long-term potentiation encode different aspects of novelty acquisition. *Proc. Natl. Acad. Sci. U S A* **101**, 8192 (2004).
18	D. Cao, H. Lu, T. L. Lewis, L. Li, Intake of sucrose-sweetened water induces insulin resistance and exacerbates memory deficits and amyloidosis in a transgenic mouse model of alzheimer disease. *J. Biol. Chem.* **282**, 36275 (2007).
19	J. Wang *et al.* , Metformin activates an atypical pkc-cbp pathway to promote neurogenesis and enhance spatial memory formation. *J. Psychopharmacol.* **11**, 23 (2012).
20	B. J. Wiltgen, M. J. Sanders, S. G. Anagnostaras, J. R. Sage, M. S. Fanselow, Context fear learning in the absence of the hippocampus. *J. Neurosci.* **26**, 5484 (2006).
21	A. S. Ivy *et al.* , Hippocampal dysfunction and cognitive impairments provoked by chronic early-life stress involve excessive activation of crh receptors. *J. Neurosci.* **30**, 13005 (2010).
22	H. Wei *et al.* , Behavioural study of the d-galactose induced aging model in c57bl/6j mice. *Behav. Brain Res.* **157**, 245 (2005).
23	A. A. Mutso *et al.* , Abnormalities in hippocampal functioning with persistent pain. *J. Neurosci.* **32**, 5747 (2012).
24	M. O'Shea, M. E. Singh, I. S. McGregor, P. E. Mallet, Chronic cannabinoid exposure produces lasting memory impairment and increased anxiety in adolescent but not adult rats. *J. Psychopharmacol.* **18**, 502 (2004).
25	L. Thirumangalakudi *et al.* , High cholesterol-induced neuroinflammation and amyloid precursor protein processing correlate with loss of working memory in mice. *J. Neurochem.* **106**, 475 (2008).

Sensation and Perception

Not Reported	Ambiguous	Light	Dark	Both	Total:
21	0	2	2	0	25

Study #	Reference	Report	Times Cited
1	[Bandell et al., 2004, #28057]	NR	1153
2	[Ferezou et al., 2007, #73386]	NR	371
3	[Talavera et al., 2005, #24343]	NR	274
4	[Houweling and Brecht, 2008, #82113]	NR	246
5	[Chandrashekar et al., 2009, #80147]	NR	178
6	[Weiss et al., 2011, #34336]	NR	165
7	[Ritt et al., 2008, #98379]	NR	145
8	[Takashima et al., 2007, #72925]	NR	139
9	[O'Connor et al., 2013, #1102]	NR	116
10	[Mehta et al., 2007, #25426]	NR	102
11	[Tan and McNaughton, 2016, #2950]	NR	93
12	[Huang et al., 2011, #29841]	L	91
13	[Roza et al., 2004, #257]	NR	83
14	[Nagashima and Touhara, 2010, #4640]	NR	59
15	[Kwon et al., 2016, #91408]	D	51
16	[Lolignier et al., 2015, #72659]	NR	39
17	[Philippaert et al., 2017, #53852]	NR	40
18	[Lafrance et al., 2010, #81451]	L	34
19	[Scott et al., 2007, #3027]	NR	28
20	[Distrutti et al., 2010, #14635]	NR	26
21	[Guo et al., 2015, #88497]	NR	26
22	[Pekárková et al., 2001, #66264]	D	25
23	[Hong et al., 2018, #15414]	NR	21
24	[Wetzel et al., 2017, #18377]	NR	18
25	[Voigt et al., 2008, #56975]	**NR**	**20**

Sensation and Perception

Study #	Full Reference
1	M. Bandell *et al.* , Noxious cold ion channel trpa1 is activated by pungent compounds and bradykinin. *Neuron* **41**, 849 (2004).
2	I. Ferezou *et al.* , Spatiotemporal dynamics of cortical sensorimotor integration in behaving mice. *Neuron* **56**, 907 (2007).
3	K. Talavera *et al.* , Heat activation of trpm5 underlies thermal sensitivity of sweet taste. *Nature* **438**, 1022 (2005).
4	A. R. Houweling, M. Brecht, Behavioural report of single neuron stimulation in somatosensory cortex. *Nature* **451**, 65 (2008).
5	J. Chandrashekar *et al.* , The taste of carbonation. *Science* **326**, 443 (2009).
6	J. Weiss *et al.* , Loss-of-function mutations in sodium channel nav1.7 cause anosmia. *Nature* **472**, 186 (2011).
7	J. T. Ritt, M. L. Andermann, C. I. Moore, Embodied information processing: Vibrissa mechanics and texture features shape micromotions in actively sensing rats. *Neuron* **57**, 599 (2008).
8	Y. Takashima *et al.* , Diversity in the neural circuitry of cold sensing revealed by genetic axonal labeling of transient receptor potential melastatin 8 neurons. *J. Neurosci.* **27**, 14147 (2007).
9	D. H. O'Connor *et al.* , Neural coding during active somatosensation revealed using illusory touch. *Nat. Neurosci.* **16**, 958 (2013).
10	S. B. Mehta, D. Whitmer, R. Figueroa, B. A. Williams, D. Kleinfeld, Active spatial perception in the vibrissa scanning sensorimotor system. *PLoS Biol.* **5**, e15 (2007).
11	C. H. Tan, P. A. McNaughton, The trpm2 ion channel is required for sensitivity to warmth. *Nature* **536**, 460 (2016).
12	S. M. Huang, X. Li, Y. Yu, J. Wang, M. J. Caterina, Trpv3 and trpv4 ion channels are not major contributors to mouse heat sensation. *Mol Pain* **7**, 37 (2011).
13	C. Roza *et al.* , Knockout of the asic2 channel in mice does not impair cutaneous mechanosensation, visceral mechanonociception and hearing. *J. Physiol.* **558**, 659 (2004).
14	A. Nagashima, K. Touhara, Enzymatic conversion of odorants in nasal mucus affects olfactory glomerular activation patterns and odor perception. *J. Neurosci.* **30**, 16391 (2010).
15	S. E. Kwon, H. Yang, G. Minamisawa, D. H. O'Connor, Sensory and decision-related activity propagate in a cortical feedback loop during touch perception. *Nat. Neurosci.* **19**, 1243 (2016).
16	S. Lolignier *et al.* , The nav1.9 channel is a key determinant of cold pain sensation and cold allodynia. *Nat. Neurosci.* **11**, 1067 (2015).
17	K. Philippaert *et al.* , Steviol glycosides enhance pancreatic beta-cell function and taste sensation by potentiation of trpm5 channel activity. *Mol Pain* **8**, 14733 (2017).
18	M. Lafrance *et al.* , Involvement of nts2 receptors in stress-induced analgesia. *Neuroscience* **166**, 639 (2010).
19	J. W. Scott, H. P. Acevedo, L. Sherrill, M. Phan, Responses of the rat olfactory epithelium to retronasal air flow. *J. Neurophysiol.* **97**, 1941 (2007).
20	E. Distrutti *et al.* , Hydrogen sulphide induces micro opioid receptor-dependent analgesia in a rodent model of visceral pain. *Mol Pain* **6**, 36 (2010).
21	W. Guo *et al.* , Hearing the light: Neural and perceptual encoding of optogenetic stimulation in the central auditory pathway. *Sci. Rep.* **5**, 10319 (2015).
22	I. Pekárková *et al.* , Does exogenous melatonin influence the free radicals metabolism and pain sensation in rat? *Physiol. Res.* **50**, 595 (2001).
23	Y. K. Hong, C. O. Lacefield, C. C. Rodgers, R. M. Bruno, Sensation, movement and learning in the absence of barrel cortex. *Nature* **561**, 542 (2018).
24	C. Wetzel *et al.* , Small-molecule inhibition of stoml3 oligomerization reverses pathological mechanical hypersensitivity. *Nat. Neurosci.* **20**, 209 (2017).
25	B. C. Voigt, M. Brecht, A. R. Houweling, Behavioral detectability of single-cell stimulation in the ventral posterior medial nucleus of the thalamus. *J. Neurosci.* **28**, 12362 (2008).

Attention

Not Reported	Ambiguous	Light	Dark	Both	Total:
11	2	3	7	2	25

Study #	Reference	Report	Times Cited
1	[Frankland et al., 2004, #97566]	L	188
2	[Carlezon et al., 2003, #1308]	A	185
3	[Passetti et al., 2002, #6866]	D	163
4	[van Gaalen et al., 2006, #91165]	D	160
5	[Salas et al., 2003, #13856]	L	143
6	[Bari et al., 2009, #22378]	D	132
7	[Koike et al., 2009, #87946]	NR	124
8	[Winstanley et al., 2007, #60113]	D	102
9	[Robinson et al., 2008, #45999]	D	95
10	[Colacicco et al., 2002, #28513]	NR	88
11	[Shirvalkar et al., 2006, #24960]	NR	86
12	[Revel et al., 2012, #72691]	A	83
13	[Smith et al., 2014, #17961]	NR	81
14	[Yang et al., 2003, #23871]	B	80
15	[Winstanley et al., 2005, #42005]	D	76
16	[Gisquet-Verrier and Delatour, 2006, #19667]	NR	64
17	[Kozak et al., 2014, #95119]	NR	60
18	[Hosking et al., 2014, #99602]	NR	60
19	[Berridge et al., 2012, #83802]	NR	56
20	[Chang et al., 2003, #51967]	NR	56
21	[Sanchez-Roige et al., 2014, #42930]	L	55
22	[Cocker et al., 2012, #58352]	NR	52
23	[Weible et al., 2009, #61304]	NR	52
24	[Callahan et al., 2008, #32222]	B	49
25	[Dall et al., 2001, #37474]	**D**	**49**

Attention

Study #	Full Reference
1	P. W. Frankland *et al.* , Sensorimotor gating abnormalities in young males with fragile x syndrome and fmr1-knockout mice. *Mol Psychiatry* **9**, 417 (2004).
2	W. A. Carlezon, S. D. Mague, S. L. Andersen, Enduring behavioral effects of early exposure to methylphenidate in rats. *Biol Psychiatry* **54**, 1330 (2003).
3	F. Passetti, Y. Chudasama, T. W. Robbins, The frontal cortex of the rat and visual attentional performance: Dissociable functions of distinct medial prefrontal subregions. *Cereb. Cortex* **12**, 1254 (2002).
4	M. M. van Gaalen, R. J. Brueggeman, P. F. Bronius, A. N. Schoffelmeer, L. J. Vanderschuren, Behavioral disinhibition requires dopamine receptor activation. *Cereb. Cortex* **187**, 73 (2006).
5	R. Salas *et al.* , The nicotinic acetylcholine receptor subunit alpha 5 mediates short-term effects of nicotine in vivo. *Mol. Pharmacol.* **63**, 1059 (2003).
6	A. Bari, D. M. Eagle, A. C. Mar, E. S. Robinson, T. W. Robbins, Dissociable effects of noradrenaline, dopamine, and serotonin uptake blockade on stop task performance in rats. *Mol. Pharmacol.* **205**, 273 (2009).
7	H. Koike *et al.* , Behavioral abnormality and pharmacologic response in social isolation-reared mice. *Behav. Brain Res.* **202**, 114 (2009).
8	C. A. Winstanley *et al.* , Deltafosb induction in orbitofrontal cortex mediates tolerance to cocaine-induced cognitive dysfunction. *J. Neurosci.* **27**, 10497 (2007).
9	E. S. Robinson *et al.* , Opposing roles for 5-ht2a and 5-ht2c receptors in the nucleus accumbens on inhibitory response control in the 5-choice serial reaction time task. *Neuropsychopharmacology* **33**, 2398 (2008).
10	G. Colacicco, H. Welzl, H. P. Lipp, H. Würbel, Attentional set-shifting in mice: Modification of a rat paradigm, and evidence for strain-dependent variation. *Behav. Brain Res.* **132**, 95 (2002).
11	P. Shirvalkar, M. Seth, N. D. Schiff, D. G. Herrera, Cognitive enhancement with central thalamic electrical stimulation. *Proc. Natl. Acad. Sci. U S A* **103**, 17007 (2006).
12	F. G. Revel *et al.* , Trace amine-associated receptor 1 partial agonism reveals novel paradigm for neuropsychiatric therapeutics. *J. Med. Chem.* **72**, 934 (2012).
13	A. L. Smith, M. Alexander, T. S. Rosenkrantz, M. L. Sadek, R. H. Fitch, Sex differences in behavioral outcome following neonatal hypoxia ischemia: Insights from a clinical meta-analysis and a rodent model of induced hypoxic ischemic brain injury. *Exp. Neurol.* **254**, 54 (2014).
14	P. B. Yang, B. Amini, A. C. Swann, N. Dafny, Strain differences in the behavioral responses of male rats to chronically administered methylphenidate. *Brain Res.* **971**, 139 (2003).
15	C. A. Winstanley, C. Baunez, D. E. Theobald, T. W. Robbins, Lesions to the subthalamic nucleus decrease impulsive choice but impair autoshaping in rats: The importance of the basal ganglia in pavlovian conditioning and impulse control. *Eur. J. Neurosci.* **21**, 3107 (2005)
16	P. Gisquet-Verrier, B. Delatour, The role of the rat prelimbic/infralimbic cortex in working memory: Not involved in the short-term maintenance but in monitoring and processing functions. *Neuroscience* **141**, 585 (2006).
17	R. Kozak *et al.* , Reduction of brain kynurenic acid improves cognitive function. *J. Neurosci.* **34**, 10592 (2014).
18	J. G. Hosking, P. J. Cocker, C. A. Winstanley, Dissociable contributions of anterior cingulate cortex and basolateral amygdala on a rodent cost/benefit decision-making task of cognitive effort. *Neuropsychopharmacology* **39**, 1558 (2014).
19	C. W. Berridge *et al.* , Differential sensitivity to psychostimulants across prefrontal cognitive tasks: Differential involvement of noradrenergic α_1- and α_2-receptors. *J. Med. Chem.* **71**, 467 (2012).
20	J. Y. Chang, L. H. Shi, F. Luo, D. J. Woodward, High frequency stimulation of the subthalamic nucleus improves treadmill locomotion in unilateral 6-hydroxydopamine lesioned rats. *Brain Res.* **983**, 174 (2003).
21	S. Sanchez-Roige *et al.* , Exaggerated waiting impulsivity associated with human binge drinking, and high alcohol consumption in mice. *Neuropsychopharmacology* **39**, 2919 (2014).
22	P. J. Cocker, J. G. Hosking, J. Benoit, C. A. Winstanley, Sensitivity to cognitive effort mediates psychostimulant effects on a novel rodent cost/benefit decision-making task. *Neuropsychopharmacology* **37**, 1825 (2012).
23	A. P. Weible, D. C. Rowland, R. Pang, C. Kentros, Neural correlates of novel object and novel location recognition behavior in the mouse anterior cingulate cortex. *J. Neurophysiol.* **102**, 2055 (2009).
24	B. L. Callahan, A. S. Gil, A. Levesque, J. S. Mogil, Modulation of mechanical and thermal nociceptive sensitivity in the laboratory mouse by behavioral state. *J. Med. Chem.* **9**, 174 (2008).
25	S. R. X. Dall, B. P. Kotler, A. Bouskila, Attention,'apprehension' and gerbils searching in patches. *J. Med. Chem.* **38**, 15 (2001).

Food Intake

Not Reported	Ambiguous	Light	Dark	Both	Total:
2	12	5	2	4	25

Study #	Reference	Report	Times Cited
1	[Qian et al., 2002, #9206]	A	293
2	[Bayol et al., 2007, #20276]	L	252
3	[Drazen et al., 2006, #50514]	L	219
4	[Haynes et al., 2000, #78388]	A	213
5	[Tang-Christensen et al., 2000, #27197]	B	197
6	[Zhan et al., 2013, #89374]	A	163
7	[Proulx et al., 2002, #45588]	L	152
8	[Bocarsly et al., 2010, #73473]	A	137
9	[Della-Zuana et al., 2002, #43214]	L	136
10	[Wiley et al., 2005, #15376]	A	126
11	[Colombo et al., 2002, #88782]	D	122
12	[Jerlhag, 2008, #13431]	NR	120
13	[Albaugh et al., 2006, #64200]	A	118
14	[Ye et al., 2014, #16458]	B	105
15	[Mack et al., 2006, #27944]	A	101
16	[Cluny et al., 2010, #40807]	A	93
17	[Collin et al., 2000, #100777]	L	88
18	[Berner et al., 2008, #41065]	D	82
19	[Tong et al., 2011, #43735]	A	79
20	[Fu et al., 2008, #69129]	B	74
21	[Liu et al., 2006, #65942]	A	74
22	[Sahu, 2002, #67252]	A	74
23	[Sotak et al., 2005, #74122]	NR	73
24	[McBriar et al., 2006, #29419]	A	68
25	[la Fleur et al., 2014, #64525]	**B**	**67**

Food Intake

Study #	Full Reference
1	S. Qian *et al.*, Neither agouti-related protein nor neuropeptide y is critically required for the regulation of energy homeostasis in mice. *Mol. Cell. Biol.* **22**, 5027 (2002).
2	S. A. Bayol, S. J. Farrington, N. C. Stickland, A maternal 'junk food' diet in pregnancy and lactation promotes an exacerbated taste for 'junk food' and a greater propensity for obesity in rat offspring. *Br. J. Nutr.* **98**, 843 (2007).
3	D. L. Drazen, T. P. Vahl, D. A. D'Alessio, R. J. Seeley, S. C. Woods, Effects of a fixed meal pattern on ghrelin secretion: Evidence for a learned response independent of nutrient status. *Endocrinology* **147**, 23 (2006).
4	A. C. Haynes *et al.*, A selective orexin-1 receptor antagonist reduces food consumption in male and female rats. *Brain Res.* **96**, 45 (2000).
5	M. Tang-Christensen, P. J. Larsen, J. Thulesen, J. Rømer, N. Vrang, The proglucagon-derived peptide, glucagon-like peptide-2, is a neurotransmitter involved in the regulation of food intake. *Nat. Med.* **6**, 802 (2000).
6	C. Zhan *et al.*, Acute and long-term suppression of feeding behavior by pomc neurons in the brainstem and hypothalamus, respectively. *J. Neurosci.* **33**, 3624 (2013).
7	K. Proulx, D. Richard, C. D. Walker, Leptin regulates appetite-related neuropeptides in the hypothalamus of developing rats without affecting food intake. *Endocrinology* **143**, 4683 (2002).
8	M. E. Bocarsly, E. S. Powell, N. M. Avena, B. G. Hoebel, High-fructose corn syrup causes characteristics of obesity in rats: Increased body weight, body fat and triglyceride levels. *Pharmacol. Biochem. Behav.* **97**, 101 (2010).
9	O. Della-Zuana *et al.*, Acute and chronic administration of melanin-concentrating hormone enhances food intake and body weight in wistar and sprague-dawley rats. *Int J Obes Relat Metab Disord* **26**, 1289 (2002).
10	J. L. Wiley *et al.*, Cb1 cannabinoid receptor-mediated modulation of food intake in mice. *Br. J. Pharmacol.* **145**, 293 (2005).
11	G. Colombo *et al.*, Stimulation of voluntary ethanol intake by cannabinoid receptor agonists in ethanol-preferring sp rats. *Br. J. Pharmacol.* **159**, 181 (2002).
12	E. Jerlhag, Systemic administration of ghrelin induces conditioned place preference and stimulates accumbal dopamine. *Br. J. Pharmacol.* **13**, 358 (2008).
13	V. L. Albaugh *et al.*, Hormonal and metabolic effects of olanzapine and clozapine related to body weight in rodents. *Obesity (Silver Spring)* **14**, 36 (2006).
14	J. Ye *et al.*, Glp-1 receptor signaling is not required for reduced body weight after rygb in rodents. *Br. J. Pharmacol.* **306**, R352 (2014).
15	C. M. Mack *et al.*, Antiobesity action of peripheral exenatide (exendin-4) in rodents: Effects on food intake, body weight, metabolic status and side-effect measures. *Int J Obes (Lond)* **30**, 1332 (2006).
16	N. L. Cluny *et al.*, A novel peripherally restricted cannabinoid receptor antagonist, am6545, reduces food intake and body weight, but does not cause malaise, in rodents. *Br. J. Pharmacol.* **161**, 629 (2010).
17	M. Collin, M. L. Håkansson-Ovesjö, I. Misane, S. O. Ogren, B. Meister, Decreased 5-ht transporter mrna in neurons of the dorsal raphe nucleus and behavioral depression in the obese leptin-deficient ob/ob mouse. *Brain Res.* **81**, 51 (2000).
18	L. A. Berner, N. M. Avena, B. G. Hoebel, Bingeing, self-restriction, and increased body weight in rats with limited access to a sweet-fat diet. *Br. J. Pharmacol.* **16**, 1998 (2008).
19	J. Tong *et al.*, Ghrelin enhances olfactory sensitivity and exploratory sniffing in rodents and humans. *J. Neurosci.* **31**, 5841 (2011).
20	J. Fu, J. Kim, F. Oveisi, G. Astarita, D. Piomelli, Targeted enhancement of oleoylethanolamide production in proximal small intestine induces across-meal satiety in rats. *Br. J. Pharmacol.* **295**, R45 (2008).
21	Y. L. Liu, N. M. Malik, G. J. Sanger, P. L. Andrews, Ghrelin alleviates cancer chemotherapy-associated dyspepsia in rodents. *Br. J. Pharmacol.* **58**, 326 (2006).
22	A. Sahu, Resistance to the satiety action of leptin following chronic central leptin infusion is associated with the development of leptin resistance in neuropeptide y neurones. *J. Neuroendocrinol.* **14**, 796 (2002).
23	B. N. Sotak, T. S. Hnasko, S. Robinson, E. J. Kremer, R. D. Palmiter, Dysregulation of dopamine signaling in the dorsal striatum inhibits feeding. *Brain Res.* **1061**, 88 (2005).
24	M. D. McBriar *et al.*, Discovery of orally efficacious melanin-concentrating hormone receptor-1 antagonists as antiobesity agents. Synthesis, sar, and biological evaluation of bicyclo[3.1.0]hexyl ureas. *J. Med. Chem.* **49**, 2294 (2006).
25	S. E. la Fleur, M. C. Luijendijk, E. M. van der Zwaal, M. A. Brans, R. A. Adan, The snacking rat as model of human obesity: Effects of a free-choice high-fat high-sugar diet on meal patterns. *Brain Res.* **38**, 643 (2014).

Mating

Not Reported	Ambiguous	Light	Dark	Both	Total:
8	5	5	6	1	25

Study #	Reference	Report	Times Cited
1	[Lin et al., 2011, #71225]	NR	390
2	[Gingrich et al., 2000, #87939]	NR	192
3	[Bakker et al., 2006, #47276]	NR	185
4	[Ross et al., 2009, #93288]	A	182
5	[Panksepp et al., 2007, #17458]	D	175
6	[Bosch et al., 2009, #35424]	L	116
7	[Apostolakis et al., 2000, #77440]	NR	80
8	[Liu et al., 2010, #39912]	A	61
9	[delBarco-Trillo and Ferkin, 2006, #54966]	L	58
10	[Asher et al., 2008, #36485]	A	56
11	[Willis and Poulin, 2000, #97113]	D	54
12	[Roullet et al., 2011, #91453]	L	53
13	[Resendez et al., 2013, #90275]	NR	52
14	[Kennaway et al., 2004, #32409]	B	51
15	[Young et al., 2014, #90776]	NR	49
16	[Song et al., 2010, #51284]	L	49
17	[Frye and Rhodes, 2006, #2450]	A	45
18	[Maras and Petrulis, 2006, #26326]	D	44
19	[Zenuto et al., 2001, #1571]	A	44
20	[Willadsen et al., 2014, #54847]	L	43
21	[Ramm et al., 2008, #64057]	D	43
22	[Patisaul et al., 2004, #52651]	D	42
23	[Remedios et al., 2017, #47765]	NR	36
24	[Woodley and Baum, 2004, #98260]	NR	35
25	[Hellier et al., 2018, #33226]	**D**	**31**

Mating

Study #	Full Reference
1	D. Lin *et al.* , Functional identification of an aggression locus in the mouse hypothalamus. *Nature* **470**, 221 (2011).
2	B. Gingrich, Y. Liu, C. Cascio, Z. Wang, T. R. Insel, Dopamine d2 receptors in the nucleus accumbens are important for social attachment in female prairie voles (microtus ochrogaster). *Behav. Neurosci.* **114**, 173 (2000).
3	J. Bakker *et al.* , Alpha-fetoprotein protects the developing female mouse brain from masculinization and defeminization by estrogens. *Nat. Neurosci.* **9**, 220 (2006).
4	H. E. Ross *et al.* , Variation in oxytocin receptor density in the nucleus accumbens has differential effects on affiliative behaviors in monogamous and polygamous voles. *J. Neurosci.* **29**, 1312 (2009).
5	J. B. Panksepp *et al.* , Affiliative behavior, ultrasonic communication and social reward are influenced by genetic variation in adolescent mice. *PLoS One* **2**, e351 (2007).
6	O. J. Bosch, H. P. Nair, T. H. Ahern, I. D. Neumann, L. J. Young, The crf system mediates increased passive stress-coping behavior following the loss of a bonded partner in a monogamous rodent. *Neuropsychopharmacology* **34**, 1406 (2009).
7	E. M. Apostolakis, J. Garai, J. E. Lohmann, J. H. Clark, B. W. O'Malley, Epidermal growth factor activates reproductive behavior independent of ovarian steroids in female rodents. *Mol. Endocrinol.* **14**, 1086 (2000).
8	Y. Liu *et al.* , Nucleus accumbens dopamine mediates amphetamine-induced impairment of social bonding in a monogamous rodent species. *Proc. Natl. Acad. Sci. U S A* **107**, 1217 (2010).
9	J. delBarco-Trillo, M. H. Ferkin, Male meadow voles respond differently to risk and intensity of sperm competition. *Behavioral Ecology* **17**, 581 (2006).
10	M. Asher *et al.* , Large males dominate: Ecology, social organization, and mating system of wild cavies, the ancestors of the guinea pig. *Behavioral Ecology and Sociobiology* **62**, 1509 (2008).
11	C. Willis, R. Poulin, Preference of female rats for the odours of non-parasitised males: The smell of good genes. *Mol. Endocrinol.* **47**, 6 (2000).
12	F. I. Roullet, M. Wöhr, J. N. Crawley, Female urine-induced male mice ultrasonic vocalizations, but not scent-marking, is modulated by social experience. *Behav. Brain Res.* **216**, 19 (2011).
13	S. L. Resendez *et al.* , M-opioid receptors within subregions of the striatum mediate pair bond formation through parallel yet distinct reward mechanisms. *J. Neurosci.* **33**, 9140 (2013).
14	D. J. Kennaway, M. J. Boden, A. Voultsios, Reproductive performance in female clock delta19 mutant mice. *Reprod. Fertil. Dev.* **16**, 801 (2004).
15	K. A. Young, Y. Liu, K. L. Gobrogge, H. Wang, Z. Wang, Oxytocin reverses amphetamine-induced deficits in social bonding: Evidence for an interaction with nucleus accumbens dopamine. *J. Neurosci.* **34**, 8499 (2014).
16	Z. Song *et al.* , Sexual or paternal experiences alter alloparental behavior and the central expression of eralpha and ot in male mandarin voles (microtus mandarinus). *Behav. Brain Res.* **214**, 290 (2010).
17	C. A. Frye, M. E. Rhodes, Infusions of 5alpha-pregnan-3alpha-ol-20-one (3alpha,5alpha-thp) to the ventral tegmental area, but not the substantia nigra, enhance exploratory, anti-anxiety, social and sexual behaviours and concomitantly increase 3alpha,5alpha-thp concentrations in the hippocampus, diencephalon and cortex of ovariectomised oestrogen-primed rats. *J. Neuroendocrinol.* **18**, 960 (2006).
18	P. M. Maras, A. Petrulis, Chemosensory and steroid-responsive regions of the medial amygdala regulate distinct aspects of opposite-sex odor preference in male syrian hamsters. *Eur. J. Neurosci.* **24**, 3541 (2006).
19	R. R. Zenuto, A. I. Vassallo, C. Busch, A method for studying social and reproductive behaviour of subterranean rodents in captivity. *Acta Theriologica* **46**, 161 (2001).
20	M. Willadsen, D. Seffer, R. K. Schwarting, M. Wöhr, Rodent ultrasonic communication: Male prosocial 50-khz ultrasonic vocalizations elicit social approach behavior in female rats (rattus norvegicus). *J. Comp. Psychol.* **128**, 56 (2014).
21	S. A. Ramm, S. A. Cheetham, J. L. Hurst, Encoding choosiness: Female attraction requires prior physical contact with individual male scents in mice. *J. Comp. Psychol.* **275**, 1727 (2008).
22	H. B. Patisaul, J. R. Luskin, M. E. Wilson, A soy supplement and tamoxifen inhibit sexual behavior in female rats. *Horm. Behav.* **45**, 270 (2004).
23	R. Remedios *et al.* , Social behaviour shapes hypothalamic neural ensemble representations of conspecific sex. *Nature* **550**, 388 (2017).
24	S. K. Woodley, M. J. Baum, Differential activation of glomeruli in the ferret's main olfactory bulb by anal scent gland odours from males and females: An early step in mate identification. *Eur. J. Neurosci.* **20**, 1025 (2004).
25	V. Hellier *et al.* , Female sexual behavior in mice is controlled by kisspeptin neurons. *Horm. Behav.* **9**, 400 (2018).

Maternal

Not Reported	Ambiguous	Light	Dark	Both	Total:
9	3	4	4	5	25

Study #	Reference	Report	Times Cited
1	[Franklin et al., 2010, #40662]	NR	580
2	[Deacon, 2006, #56043]	D	364
3	[Champagne and Meaney, 2006, #44038]	B	288
4	[Smith et al., 2004, #13736]	B	185
5	[Ross et al., 2009, #93288]	A	184
6	[Branchi et al., 2006, #57473]	B	147
7	[Veenema et al., 2007, #73936]	D	140
8	[Olazábal and Young, 2006, #13937]	NR	133
9	[Malter Cohen et al., 2013, #55014]	D	131
10	[Ricceri et al., 2006, #23340]	NR	127
11	[Rayen et al., 2011, #89301]	L	111
12	[Gammie and Nelson, 2001, #3199]	L	97
13	[Chamero et al., 2011, #55747]	NR	95
14	[Tang et al., 2006, #29062]	B	94
15	[Scattoni et al., 2008, #93606]	D	91
16	[Tsuneoka et al., 2013, #71185]	NR	76
17	[Larsen et al., 2008, #71157]	A	72
18	[Levine et al., 2012, #58300]	A	70
19	[Pardon et al., 2000, #35622]	NR	67
20	[Jia et al., 2009, #4760]	NR	66
21	[Debiec and Sullivan, 2014, #98090]	NR	65
22	[Friske and Gammie, 2005, #14715]	L	64
23	[Calatayud et al., 2004, #50155]	L	64
24	[Baharnoori et al., 2012, #26784]	B	28
25	[Bowers et al., 2013, #23092]	**NR**	**57**

Maternal

Study #	Full Reference
1	T. B. Franklin *et al.* , Epigenetic transmission of the impact of early stress across generations. *Eur. J. Neurosci.* **68**, 408 (2010).
2	R. M. Deacon, Assessing nest building in mice. *Eur. J. Neurosci.* **1**, 1117 (2006).
3	F. A. Champagne, M. J. Meaney, Stress during gestation alters postpartum maternal care and the development of the offspring in a rodent model. *Eur. J. Neurosci.* **59**, 1227 (2006).
4	J. W. Smith, J. R. Seckl, A. T. Evans, B. Costall, J. W. Smythe, Gestational stress induces post-partum depression-like behaviour and alters maternal care in rats. *J. Neurosci.* **29**, 227 (2004).
5	H. E. Ross *et al.* , Variation in oxytocin receptor density in the nucleus accumbens has differential effects on affiliative behaviors in monogamous and polygamous voles. *J. Neurosci.* **29**, 1312 (2009).
6	I. Branchi *et al.* , Early social enrichment shapes social behavior and nerve growth factor and brain-derived neurotrophic factor levels in the adult mouse brain. *Eur. J. Neurosci.* **60**, 690 (2006).
7	A. H. Veenema, R. Bredewold, I. D. Neumann, Opposite effects of maternal separation on intermale and maternal aggression in c57bl/6 mice: Link to hypothalamic vasopressin and oxytocin immunoreactivity. *Eur. J. Neurosci.* **32**, 437 (2007).
8	D. E. Olazábal, L. J. Young, Species and individual differences in juvenile female alloparental care are associated with oxytocin receptor density in the striatum and the lateral septum. *Horm. Behav.* **49**, 681 (2006).
9	M. Malter Cohen *et al.* , Early-life stress has persistent effects on amygdala function and development in mice and humans. *Proc. Natl. Acad. Sci. U S A* **110**, 18274 (2013).
10	L. Ricceri *et al.* , Developmental neurotoxicity of organophosphorous pesticides: Fetal and neonatal exposure to chlorpyrifos alters sex-specific behaviors at adulthood in mice. *Proc. Natl. Acad. Sci. U S A* **93**, 105 (2006).
11	I. Rayen, D. L. van den Hove, J. Prickaerts, H. W. Steinbusch, J. L. Pawluski, Fluoxetine during development reverses the effects of prenatal stress on depressive-like behavior and hippocampal neurogenesis in adolescence. *PLoS One* **6**, e24003 (2011).
12	S. C. Gammie, R. J. Nelson, Cfos and pcreb activation and maternal aggression in mice. *Brain Res.* **898**, 232 (2001).
13	P. Chamero *et al.* , G protein g(alpha)o is essential for vomeronasal function and aggressive behavior in mice. *Proc. Natl. Acad. Sci. U S A* **108**, 12898 (2011).
14	A. C. Tang, K. G. Akers, B. C. Reeb, R. D. Romeo, B. S. McEwen, Programming social, cognitive, and neuroendocrine development by early exposure to novelty. *Proc. Natl. Acad. Sci. U S A* **103**, 15716 (2006).
15	M. L. Scattoni *et al.* , Reduced ultrasonic vocalizations in vasopressin 1b knockout mice. *Behav. Brain Res.* **187**, 371 (2008).
16	Y. Tsuneoka *et al.* , Functional, anatomical, and neurochemical differentiation of medial preoptic area subregions in relation to maternal behavior in the mouse. *J. Comp. Neurol.* **521**, 1633 (2013).
17	C. M. Larsen, I. C. Kokay, D. R. Grattan, Male pheromones initiate prolactin-induced neurogenesis and advance maternal behavior in female mice. *Horm. Behav.* **53**, 509 (2008).
18	A. Levine, T. R. Worrell, R. Zimnisky, C. Schmauss, Early life stress triggers sustained changes in histone deacetylase expression and histone h4 modifications that alter responsiveness to adolescent antidepressant treatment. *Horm. Behav.* **45**, 488 (2012).
19	M. Pardon, P. Gérardin, C. Joubert, F. Pérez-Diaz, C. Cohen-Salmon, Influence of prepartum chronic ultramild stress on maternal pup care behavior in mice. *Brain Res.* **47**, 858 (2000).
20	R. Jia, F. Tai, S. An, X. Zhang, H. Broders, Effects of neonatal paternal deprivation or early deprivation on anxiety and social behaviors of the adults in mandarin voles. *Horm. Behav.* **82**, 271 (2009).
21	J. Debiec, R. M. Sullivan, Intergenerational transmission of emotional trauma through amygdala-dependent mother-to-infant transfer of specific fear. *Proc. Natl. Acad. Sci. U S A* **111**, 12222 (2014).
22	J. E. Friske, S. C. Gammie, Environmental enrichment alters plus maze, but not maternal defense performance in mice. *Physiol. Behav.* **85**, 187 (2005).
23	F. Calatayud, S. Coubard, C. Belzung, Emotional reactivity in mice may not be inherited but influenced by parents. *Physiol. Behav.* **80**, 465 (2004).
24	M. Baharnoori, S. K. Bhardwaj, L. K. Srivastava, Neonatal behavioral changes in rats with gestational exposure to lipopolysaccharide: A prenatal infection model for developmental neuropsychiatric disorders. *Physiol. Behav.* **38**, 444 (2012).
25	J. M. Bowers, M. Perez-Pouchoulen, N. S. Edwards, M. M. McCarthy, Foxp2 mediates sex differences in ultrasonic vocalization by rat pups and directs order of maternal retrieval. *J. Neurosci.* **33**, 3276 (2013).

Aggregession

Not Reported	Ambiguous	Light	Dark	Both	Total:
8	0	5	12	0	25

Study #	Reference	Report	Times Cited
1	[Sánchez et al., 2003, #25576]	D	211
2	[Oyegbile and Marler, 2005, #74177]	D	191
3	[Branchi et al., 2006, #57473]	D	149
4	[Veenema et al., 2007, #73936]	D	142
5	[Nelson et al., 1995, #50996]	NR	129
6	[Ricceri et al., 2006, #23340]	NR	127
7	[Kayasuga et al., 2007, #76871]	L	115
8	[Veenema et al., 2010, #79323]	D	99
9	[Gammie and Nelson, 2001, #3199]	L	97
10	[Chamero et al., 2011, #55747]	NR	95
11	[Scattoni et al., 2008, #93606]	D	91
12	[Dekeyne et al., 2008, #4817]	NR	85
13	[Padilla et al., 2016, #59675]	NR	80
14	[Trainor et al., 2008, #22904]	D	79
15	[Matsumoto et al., 2003, #75566]	D	78
16	[Pagani et al., 2015, #73001]	D	77
17	[Burgdorf et al., 2009, #62076]	NR	67
18	[Bibancos et al., 2007, #12831]	L	64
19	[Caramaschi et al., 2008, #68896]	D	62
20	[Klein et al., 2004, #94038]	D	58
21	[Halász et al., 2006, #12099]	D	51
22	[Nicolas et al., 2001, #81203]	L	49
23	[Bannai et al., 2007, #69594]	NR	47
24	[Yu et al., 2012, #42704]	NR	40
25	[Centenaro et al., 2008, #56647]	**L**	**38**

Aggression

Study #	Full Reference
1	C. Sánchez *et al.* , Escitalopram, the s-(+)-enantiomer of citalopram, is a selective serotonin reuptake inhibitor with potent effects in animal models predictive of antidepressant and anxiolytic activities. *Brain Res.* **167**, 353 (2003).
2	T. O. Oyegbile, C. A. Marler, Winning fights elevates testosterone levels in california mice and enhances future ability to win fights. *Horm. Behav.* **48**, 259 (2005).
3	I. Branchi *et al.* , Early social enrichment shapes social behavior and nerve growth factor and brain-derived neurotrophic factor levels in the adult mouse brain. *Eur. J. Neurosci.* **60**, 690 (2006).
4	A. H. Veenema, R. Bredewold, I. D. Neumann, Opposite effects of maternal separation on intermale and maternal aggression in c57bl/6 mice: Link to hypothalamic vasopressin and oxytocin immunoreactivity. *Eur. J. Neurosci.* **32**, 437 (2007).
5	R. J. Nelson *et al.* , Behavioural abnormalities in male mice lacking neuronal nitric oxide synthase. *Nature* **378**, 383 (1995).
6	L. Ricceri *et al.* , Developmental neurotoxicity of organophosphorous pesticides: Fetal and neonatal exposure to chlorpyrifos alters sex-specific behaviors at adulthood in mice. *Proc. Natl. Acad. Sci. U S A* **93**, 105 (2006).
7	Y. Kayasuga *et al.* , Alteration of behavioural phenotype in mice by targeted disruption of the progranulin gene. *Behav. Brain Res.* **185**, 110 (2007).
8	A. H. Veenema, D. I. Beiderbeck, M. Lukas, I. D. Neumann, Distinct correlations of vasopressin release within the lateral septum and the bed nucleus of the stria terminalis with the display of intermale aggression. *Horm. Behav.* **58**, 273 (2010).
9	S. C. Gammie, R. J. Nelson, Cfos and pcreb activation and maternal aggression in mice. *Brain Res.* **898**, 232 (2001).
10	P. Chamero *et al.* , G protein g(alpha)o is essential for vomeronasal function and aggressive behavior in mice. *Proc. Natl. Acad. Sci. U S A* **108**, 12898 (2011).
11	M. L. Scattoni *et al.* , Reduced ultrasonic vocalizations in vasopressin 1b knockout mice. *Behav. Brain Res.* **187**, 371 (2008).
12	A. Dekeyne *et al.* , S32006, a novel 5-ht2c receptor antagonist displaying broad-based antidepressant and anxiolytic properties in rodent models. *Horm. Behav.* **199**, 549 (2008).
13	S. L. Padilla *et al.* , Agouti-related peptide neural circuits mediate adaptive behaviors in the starved state. *Nat. Neurosci.* **19**, 734 (2016).
14	B. C. Trainor, M. S. Finy, R. J. Nelson, Rapid effects of estradiol on male aggression depend on photoperiod in reproductively non-responsive mice. *Horm. Behav.* **53**, 192 (2008).
15	T. Matsumoto, S. Honda, N. Harada, Alteration in sex-specific behaviors in male mice lacking the aromatase gene. *Neuroendocrinology* **77**, 416 (2003).
16	J. H. Pagani *et al.* , Role of the vasopressin 1b receptor in rodent aggressive behavior and synaptic plasticity in hippocampal area ca2. *Mol Psychiatry* **20**, 490 (2015).
17	J. Burgdorf *et al.* , The effects of selective breeding for differential rates of 50-khz ultrasonic vocalizations on emotional behavior in rats. *Anim. Behav.* **51**, 34 (2009).
18	T. Bibancos, D. L. Jardim, I. Aneas, S. Chiavegatto, Social isolation and expression of serotonergic neurotransmission-related genes in several brain areas of male mice. *Genes Brain Behav* **6**, 529 (2007).
19	D. Caramaschi, S. F. de Boer, H. de Vries, J. M. Koolhaas, Development of violence in mice through repeated victory along with changes in prefrontal cortex neurochemistry. *Behav. Brain Res.* **189**, 263 (2008).
20	S. L. Klein, M. C. Zink, G. E. Glass, Seoul virus infection increases aggressive behaviour in male norway rats. *Anim. Behav.* **67**, 421 (2004).
21	J. Halász, M. Tóth, I. Kalló, Z. Liposits, J. Haller, The activation of prefrontal cortical neurons in aggression--a double labeling study. *Behav. Brain Res.* **175**, 166 (2006).
22	L. B. Nicolas *et al.* , Aggressive behavior induced by the steroid sulfatase inhibitor coumate and by dheas in cba/h mice. *Brain Res.* **922**, 216 (2001).
23	M. Bannai, E. W. Fish, S. Faccidomo, K. A. Miczek, Anti-aggressive effects of agonists at 5-ht1b receptors in the dorsal raphe nucleus of mice. *Behav. Brain Res.* **193**, 295 (2007).
24	P. Yu *et al.* , The effects of neonatal paternal deprivation on pair bonding, nacc dopamine receptor mrna expression and serum corticosterone in mandarin voles. *Horm. Behav.* **61**, 669 (2012).
25	L. A. Centenaro *et al.* , Social instigation and aggressive behavior in mice: Role of 5-ht1a and 5-ht1b receptors in the prefrontal cortex. *Horm. Behav.* **201**, 237 (2008).

Drug Seeking

Not Reported	Ambiguous	Light	Dark	Both	Total:
8	2	5	7	3	25

Study #	Reference	Report	Times Cited
1	[Koya et al., 2009, #28008]	D	152
2	[Mantsch et al., 2004, #8184]	D	140
3	[Noonan et al., 2010, #367]	NR	133
4	[Fernández-Teruel et al., 2002, #33470]	NR	109
5	[DePoy et al., 2013, #10561]	B	108
6	[Li et al., 2008, #78402]	NR	107
7	[Rogers and See, 2007, #66839]	NR	97
8	[Uz et al., 2005, #46930]	D	97
9	[Malkesman et al., 2010, #92429]	B	95
10	[Pan et al., 2008, #70592]	NR	94
11	[Hopf et al., 2010, #51738]	B	93
12	[Shoblock et al., 2011, #31208]	L	92
13	[Brimijoin et al., 2008, #10821]	L	92
14	[Cowen et al., 2005, #68454]	NR	91
15	[Wee et al., 2008, #22640]	D	90
16	[Meinhardt et al., 2013, #92044]	D	89
17	[Warnault et al., 2013, #6617]	A	82
18	[Amen et al., 2011, #65253]	NR	82
19	[Neasta et al., 2010, #14269]	A	81
20	[Thanos et al., 2008, #100246]	D	80
21	[Nadal et al., 2002, #3120]	L	74
22	[Jerlhag and Engel, 2011, #40907]	NR	73
23	[Lenoir and Ahmed, 2007, #99222]	D	71
24	[Slaker et al., 2015, #15085]	L	69
25	[Shiflett et al., 2010, #34167]	**L**	**68**

Drug Seeking

Study #	Full Reference
1	E. Koya *et al.*, Role of ventral medial prefrontal cortex in incubation of cocaine craving. *Neuropharmacology* **56 Suppl 1**, 177 (2009).
2	J. R. Mantsch, V. Yuferov, A. M. Mathieu-Kia, A. Ho, M. J. Kreek, Effects of extended access to high versus low cocaine doses on self-administration, cocaine-induced reinstatement and brain mrna levels in rats. *Genome Res.* **175**, 26 (2004).
3	M. A. Noonan, S. E. Bulin, D. C. Fuller, A. J. Eisch, Reduction of adult hippocampal neurogenesis confers vulnerability in an animal model of cocaine addiction. *J. Neurosci.* **30**, 304 (2010).
4	A. Fernández-Teruel *et al.*, A quantitative trait locus influencing anxiety in the laboratory rat. *Genome Res.* **12**, 618 (2002).
5	L. DePoy *et al.*, Chronic alcohol produces neuroadaptations to prime dorsal striatal learning. *Proc. Natl. Acad. Sci. U S A* **110**, 14783 (2013).
6	Y. Q. Li *et al.*, Central amygdala extracellular signal-regulated kinase signaling pathway is critical to incubation of opiate craving. *J. Neurosci.* **28**, 13248 (2008).
7	J. L. Rogers, R. E. See, Selective inactivation of the ventral hippocampus attenuates cue-induced and cocaine-primed reinstatement of drug-seeking in rats. *Neurobiol Learn Mem* **87**, 688 (2007).
8	T. Uz *et al.*, The regional and cellular expression profile of the melatonin receptor mt1 in the central dopaminergic system. *Brain Res Mol Brain Res* **136**, 45 (2005).
9	O. Malkesman *et al.*, The female urine sniffing test: A novel approach for assessing reward-seeking behavior in rodents. *Biol Psychiatry* **67**, 864 (2010).
10	B. Pan, C. J. Hillard, Q. S. Liu, Endocannabinoid signaling mediates cocaine-induced inhibitory synaptic plasticity in midbrain dopamine neurons. *J. Neurosci.* **28**, 1385 (2008).
11	F. W. Hopf, S. J. Chang, D. R. Sparta, M. S. Bowers, A. Bonci, Motivation for alcohol becomes resistant to quinine adulteration after 3 to 4 months of intermittent alcohol self-administration. *Alcohol Clin Exp Res* **34**, 1565 (2010).
12	J. R. Shoblock *et al.*, Selective blockade of the orexin-2 receptor attenuates ethanol self-administration, place preference, and reinstatement. *Psychopharmacology (Berl)* **215**, 191 (2011).
13	S. Brimijoin *et al.*, A cocaine hydrolase engineered from human butyrylcholinesterase selectively blocks cocaine toxicity and reinstatement of drug seeking in rats. *Neuropsychopharmacology* **33**, 2715 (2008).
14	M. S. Cowen, E. Djouma, A. J. Lawrence, The metabotropic glutamate 5 receptor antagonist 3-[(2-methyl-1,3-thiazol-4-yl)ethynyl]-pyridine reduces ethanol self-administration in multiple strains of alcohol-preferring rats and regulates olfactory glutamatergic systems. *J Pharmacol Exp Ther* **315**, 590 (2005).
15	S. Wee, C. D. Mandyam, D. M. Lekic, G. F. Koob, Alpha 1-noradrenergic system role in increased motivation for cocaine intake in rats with prolonged access. *J. Neurosci.* **18**, 303 (2008).
16	M. W. Meinhardt *et al.*, Rescue of infralimbic mglur2 deficit restores control over drug-seeking behavior in alcohol dependence. *J. Neurosci.* **33**, 2794 (2013).
17	V. Warnault, E. Darcq, A. Levine, S. Barak, D. Ron, Chromatin remodeling--a novel strategy to control excessive alcohol drinking. *Transl. Psychiatry* **3**, e231 (2013).
18	S. L. Amen *et al.*, Repeated n-acetyl cysteine reduces cocaine seeking in rodents and craving in cocaine-dependent humans. *Neuropsychopharmacology* **36**, 871 (2011).
19	J. Neasta, S. Ben Hamida, Q. Yowell, S. Carnicella, D. Ron, Role for mammalian target of rapamycin complex 1 signaling in neuroadaptations underlying alcohol-related disorders. *Proc. Natl. Acad. Sci. U S A* **107**, 20093 (2010).
20	P. K. Thanos, M. Michaelides, H. Umegaki, N. D. Volkow, D2r DNA transfer into the nucleus accumbens attenuates cocaine self-administration in rats. *Transl. Psychiatry* **62**, 481 (2008).
21	R. Nadal, A. Armario, P. H. Janak, Positive relationship between activity in a novel environment and operant ethanol self-administration in rats. *Psychopharmacology (Berl)* **162**, 333 (2002).
22	E. Jerlhag, J. A. Engel, Ghrelin receptor antagonism attenuates nicotine-induced locomotor stimulation, accumbal dopamine release and conditioned place preference in mice. *J. Neurosci.* **117**, 126 (2011).
23	M. Lenoir, S. H. Ahmed, Heroin-induced reinstatement is specific to compulsive heroin use and dissociable from heroin reward and sensitization. *Neuropsychopharmacology* **32**, 616 (2007).
24	M. Slaker *et al.*, Removal of perineuronal nets in the medial prefrontal cortex impairs the acquisition and reconsolidation of a cocaine-induced conditioned place preference memory. *J. Neurosci.* **35**, 4190 (2015).
25	M. W. Shiflett, R. A. Brown, B. W. Balleine, Acquisition and performance of goal-directed instrumental actions depends on erk signaling in distinct regions of dorsal striatum in rats. *J. Neurosci.* **30**, 2951 (2010).

Summary Report	Ambiguous	Not Reported	Light	Dark	Both	
Learning & Memory	3	17	5	0	0	
Sensation & Perception	0	21	2	2	0	
Attention	2	11	3	7	2	
Food Intake	12	2	5	2	4	
Mating	5	8	5	6	1	
Maternal	3	9	4	4	5	
Aggression	0	8	5	12	0	
Drug Seeking	2	8	5	7	3	**Total Papers**
Category Total:	27	84	34	40	15	200
% Of Reporting	13.5%	42.0%	17.0%	20.0%	7.5%	